



## State of New Jersey

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*Governor*

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*Lt. Governor*

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
7011 2970 0003 7284 3884**

**October 9, 2014**

Daryl Harris, Director  
Hess Corp.  
1 Hess Plaza  
Woodbridge, NJ 07095

Re: Draft Surface Water Revoke & Reissue Permit Action  
Category: B – Industrial Wastewater  
NJPDES Permit No. NJ0028878  
HESS CORPORATION - PORT READING TERMINAL (prior to November 10, 2014)  
BUCKEYE PORT READING TERMINAL LLC (after November 10, 2014)  
Woodbridge Twp, Middlesex County

Dear Mr. Harris:

Enclosed is a **draft** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A.

The Department has received a transfer of ownership request to transfer this NJPDES permit to Buckeye Port Reading Terminal LLC to take effect on November 10, 2014. While this permit is still owned and operated by Hess Corporation, Parts I, II, III and IV still include Hess Corporation in the heading. Once the transfer of ownership date passes, this will be changed to reflect Buckeye Port Reading Terminal and will be reflected in the final permit issued to Buckeye Port Reading Terminal LLC.

Notice of this draft permit action will appear in the *Home News Tribune* and appeared in the September 3, 2014 *DEP Bulletin*. The *DEP Bulletin* is available on the internet at <http://www.state.nj.us/dep/bulletin>. In accordance with N.J.A.C. 7:14A-15.10(c)1i, the public comment period will close thirty days after its appearance in the newspaper.

As detailed in the *DEP Bulletin* and aforementioned newspaper, written comments or a request that the Department hold a non-adversarial public hearing on the draft document, must be submitted in writing to Pilar Patterson, Chief, Bureau of Surface Water Permitting Mail Code 401-02B, Division of Water Quality, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's tentative decision to issue this draft document is inappropriate, must raise all reasonable

arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's final decision to issue, revoke, or redraft the document.

If you have questions or comments regarding the draft action, please contact Robert Hall at (609) 292-4860.

Sincerely,



Susan Rosenwinkel  
Supervising Environmental Engineer  
Bureau of Surface Water Permitting

Enclosures

c: Permit Distribution List

Masterfile #: 14854; PI #: 46052

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New Jersey Department of Environmental Protection  
Division of Water Quality  
Bureau of Surface Water Permitting

**PUBLIC NOTICE**

Notice is hereby given that the New Jersey Department of Environmental Protection (Department) proposes to revoke and reissue the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Permit NJ0028878 in accordance with N.J.A.C. 7:14A-1 et seq., and by authority of the Water Pollution Control Act at N.J.S.A. 58:10A-1 et seq., for the following discharge:

<u>Applicant or Permittee</u>	<u>Facility</u>
Hess Corp 1 Hess Plaza Woodbridge, NJ 07095	Hess Corporation - Port Reading Terminal 750 Cliff Rd Woodbridge Twp., Middlesex County

The Department is hereby revoking and reissuing the final permit issued on December 5, 2011 in order to modify the permit due to a change in operations at the facility. Hess Corporation was involved with petroleum refining under the Standard Industrial Classification (SIC) code 2911. The refinery operation and the wastewater treatment system are currently being decommissioned and removed from the site. The facility was purchased by Buckeye Port Reading Terminal LLC (Buckeye) on December 11, 2013, and has begun operating under SIC code 4226 for Special Warehousing and Storage, Not Elsewhere Classified.

The Department has received a transfer of ownership request to transfer this NJPDES permit to Buckeye Port Reading Terminal LLC to take effect on November 10, 2014. While this permit is still owned and operated by Hess Corporation, Parts I, II, III and IV still include Hess Corporation in the heading. Once the transfer of ownership date passes, this will be changed to reflect Buckeye Port Reading Terminal LLC in the final permit issued to Buckeye Port Reading Terminal LLC.

This newly issued permit action will only authorize the discharge of stormwater through the existing outfall DSN 001C to the Arthur Kill, classified as SE3 waters. Stormwater that will be discharged through this outfall includes stormwater runoff from the former refining facility process areas, storage and loading/unloading areas, and DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas). It is estimated that the stormwater flow from DSN 001C will be discharged at a monthly average of 0.6 million gallons per day. While the wastewater treatment plant is being decommissioned and will no longer be used, the existing API separator and equalization tank will remain in service for stormwater treatment.

Modification provisions as cited in the permit may be initiated in accordance with the provisions set forth in Part IV and upon written notification from the Department.

A draft NJPDES permit revoke and reissue action has been prepared for this facility based on the administrative record which is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointment for inspection may be requested through the Open Public Records Act office. Details are available online at [www.nj.gov/dep/opra](http://www.nj.gov/dep/opra), or by calling (609) 341-3121. Appointments for inspection of the NJPDES file only or requests for a copy of the draft document (for a nominal charge) may be made by calling Central File at (609) 292-0400.

Written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Pilar Patterson, Chief, or Attention: Comments on Public Notice NJ0028878, at Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water Permitting, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period, which closes after publication of this notice in the newspaper. All persons, including the applicant, who believe that any condition of this draft document is

inappropriate or that the Department's decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's permit decision.

***Public Notice of Proposed Permit Actions  
(Division of Water Quality)***

<b><i><u>Permit:</u></i></b> • <i>Name</i> • <i>NJPDES No.</i> • <i>Type</i>	<b><i><u>Facility Location:</u></i></b> • <i>Address</i> • <i>County</i>	<b><i><u>NJDEP:</u></i></b> • <i>Case manager</i> • <i>Bureau</i> • <i>Phone No.</i>	<b><i><u>Receiving Discharge:</u></i></b> • <i>Stream or Formation or POTW</i> • <i>Stream Classification</i> • <i>Watershed</i>	<b><i>Executive Summary</i></b>
Hess Corporation - Port Reading Terminal  NJ0028878  DSW Major	750 Cliff Rd Woodbridge, NJ 07064 Middlesex County	Robert Hall  Bureau of Surface Water Permitting  (609) 292-4860	Arthur Kill  SE3  Rahway River/Woodbridge Creek	The Department is hereby revoking and reissuing the final permit issued on December 5, 2011 in order to modify the permit due to a change in operations at the facility. Hess Corporation was involved with petroleum refining under the Standard Industrial Classification (SIC) code 2911. The refinery operation and the wastewater treatment system are currently being decommissioned; however, the facility was purchased by Buckeye on December 11, 2013, and has begun operating under SIC code 4226 for Special Warehousing and Storage, Not Elsewhere Classified. Treated stormwater will be discharged via discharge serial number (DSN) 001C.

New Jersey Department of Environmental Protection  
Division of Water Quality  
Bureau of Surface Water Permitting

## FACT SHEET

Masterfile #: 14854

PI #: 46052

This fact sheet sets forth the principle facts and the significant factual, legal, and policy considerations examined during preparation of the draft permit. This action has been prepared in accordance with the New Jersey Water Pollution Control Act and its implementing regulations at N.J.A.C. 7:14A-1 et seq. - The New Jersey Pollutant Discharge Elimination System.

**PERMIT ACTION:** Surface Water Revoke and Reissue Permit Action

The Department is hereby revoking and reissuing the final permit issued on December 5, 2011 in order to modify the permit due to the decommissioning of refinery operations at the facility. This newly issued permit will only authorize the discharge of stormwater through discharge serial number (DSN) 001C.

### 1 Name and Address of the Applicant:

Hess Corporation  
1 Hess Plaza  
Woodbridge, NJ 07095

Buckeye Port Reading Terminal LLC  
750 Cliff Road  
Port Reading, NJ 07064

### 2 Name and Address of the Facility/Site:

Hess Corporation - Port Reading Terminal  
750 Cliff Road  
Woodbridge Twp., Middlesex County  
(Prior to November 10, 2014)

Buckeye Port Reading Terminal LLC  
750 Cliff Road  
Woodbridge Twp., Middlesex County  
(After November 10, 2014)

### 3 Receiving Water Discharge Location Information:

A copy of the appropriate section of a United States Geological Survey (USGS) quadrangle map indicating the location of the facility and discharge point is included towards the end of this Fact Sheet.

**Outfall Designator:** DSN 001C

General Information	Watershed Information
Receiving Water: Arthur Kill	Downstream Confluences: Arthur Kill
Via : Outfall pipe	Receiving River Basin: NY/NJ Harbor Complex
Classification (a): SE3	WMA (b): 07
Latitude: 40° 33' 27.1"	Watershed: Rahway River/Woodbridge Creek
Longitude: 74° 14' 32.8"	Subwatershed: Arthur Kill waterfront (below Graselli)
County: Middlesex	HUC 14 (c): 02030104050120

Municipality: Woodbridge	Water Quality Impairments (d): Benzo(a)pyrene, Chlordane, DDD, DDE, DDT, Dieldrin, Dioxin, Heptachlor Epoxide, Hexachlorobenzene, and Polychlorinated Biphenyls (PCBs) in fish tissue
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Outfall Description	
Outfall Configuration: multi-port diffuser	Submerged Pipe Characteristics: The diffuser is 16 inches in diameter and extends approximately 30-50 feet offshore at mean low water. The average depth of the diffuser is approximately 10 feet.
Applicable Receiving Water Dilution Factors	
Acute :	22.4
Chronic :	233

#### **Footnotes:**

- (a) The designated uses for this waterbody classification can be found at N.J.A.C. 7:9B-1.12.
- (b) WMA = Watershed Management Area
- (c) HUC 14 = 14 digit Hydrologic Unit Code
- (d) These parameters are listed on Sublist 5 as impaired for this waterbody as per New Jersey's 2010 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List).

As per the Surface Water Quality Standards at N.J.A.C. 7:9B, the designated uses for the Saline Estuary 3 (SE3) receiving waters are:

1. Secondary contact recreation;
2. Maintenance and migration of fish populations;
3. Migration of diadromous fish;
4. Maintenance of wildlife; and
5. Any other reasonable uses.

As noted in Section 3 above, this segment of the Arthur Kill is impaired for Benzo(a)pyrene, Chlordane, DDT, DDD, DDE, Dieldrin, Dioxin, Heptachlor Epoxide, Hexachlorobenzene, and Polychlorinated Biphenyls (PCBs) in fish tissue. In accordance with N.J.A.C. 7:14A-13.5 and in order to evaluate the applicability of WQBELs, the monitoring requirements for Benzo(a)pyrene, Chlordane, DDT, DDD, DDE, Dieldrin, Dioxin, Heptachlor Epoxide, and Hexachlorobenzene, are retained from the existing permit. Please see Section 6.B.15 for further details.

In accordance with new regulations adopted at N.J.A.C. 7:14A-11.13 and 14.4, the permittee completed sampling for PCBs congeners as required by a permit modification issued in 2007. Based on the results of this monitoring, the Department will make a determination in the future if this facility will need to develop and implement a PCB Pollutant Minimization Plan (PMP).

## **4 Facility Description:**

### **Background**

The facility is classified as a major discharger by the Department of Environmental Protection (Department) in accordance with the United States Environmental Protection Agency (EPA) rating criteria. Based on Discharge



Monitoring Report (DMR) data for the period of January 2012 to July 2014, the facility's estimated combined long term average flow was 0.74 million gallons per day (MGD) while the daily maximum flow is 2.74 MGD. The former refinery operated an onsite wastewater treatment plant (WWTP) which had a design capacity of 2.88 MGD and discharged continuously to the Arthur Kill via Outfall DSN 001C.

Hess Corporation was involved with petroleum refining under the Standard Industrial Classification (SIC) code 2911. The refinery operation and the wastewater treatment system are currently being decommissioned and removed from the site. The facility was purchased by Buckeye on December 11, 2013 (however the actual transfer will not occur until November 10, 2014). The facility began operating under SIC code 4226 for Special Warehousing and Storage (Not Elsewhere Classified) and will be discharging stormwater only via its outfall (DSN) 001C in the future.

When operational, the primary purpose of the Port Reading Refinery was to manufacture, store, and ship quality petroleum products. Products manufactured at the facility included gasoline, #2 heating oil, #6 oil, refinery fuel gas, and liquefied petroleum gas. Normal butane was also manufactured, but it was not a finished product and went to other processing facilities. The major refining processes at the refinery included fluid catalytic cracking, hydrotreating, and H<sub>2</sub>SO<sub>4</sub> alkylation.

Sources of intake water at the facility include the Middlesex Water Company public water supply, which was the primary source for all refinery operations, including the cooling towers; and the Arthur Kill, which was and is still only used for the firewater system. The Middlesex Water Company public water supply will continue to be used as a source of potable water. Sanitary wastewater will continue to be discharged to the local municipal sewer system. The only intake water use that will remain at the facility will be the firewater system.

Wastewater components that were treated at the WWTP included process wastewater, remediation wastewater (now a general petroleum clean-up B4B permit identified under NJG225720), cooling tower blowdown, storage tank water bottoms, API sludge filtrate, and equalization tank sludge filtrate/cleanout wastewater. Additionally, all facility stormwater, consisting of stormwater runoff from refining facility process areas, storage and loading/unloading areas, DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas) and DSN 005A water (stormwater and leachate from the No.1 Landfarm) was also treated at the plant. The treatment plant also received petroleum-contaminated water from petroleum refining, storage, and distribution activities from other Hess and/or non-Hess owned facilities. Occasionally, excess stormwater collected in an onsite retention basin located on the southern side of the facility was also routed back for treatment at the plant.

### **Future Operations**

Currently, the facility is not producing petroleum products and is in the process of repurposing the facility when ownership will be transferred to Buckeye Port Reading Terminal LLC. This includes the demolition and decontamination of the existing refinery and decommissioning of the wastewater treatment plant (WWTP) which is planned to be completed by December 2014. As a result, the Department is retaining this permit as a category B facility, but may revisit this decision in the future to evaluate if these discharges can be regulated under the NJPDES stormwater program. Upgrades to the terminal operations are also taking place at the facility as it will only serve as a terminal operation in the future. Based on these substantial changes, the facility is no longer required to be regulated under the Effluent Limitation Guidelines (ELGs) of the Petroleum Refining Point Source Category, Subpart B-Cracking Subcategory at 40 CFR 419.20-27. Therefore, the Department will be removing the ELG based effluent limitations and associated monitoring requirements from this permit as they are no longer applicable.

After the repurposing of the facility, the only flow going to the WWTP will consist of stormwater from the truck loading area, the former refinery area, various tank fields, DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas, and overflow from the Smith Creek impoundment (which is a stormwater impoundment as shown on the site plan). Therefore, this permit action will only authorize those stormwater discharges through DSN 001C. Based on the DMR data from January 2012 through July 2014, the monthly average stormwater flow treated through the WWTP was 0.6 MGD. The permit is being modified to account for this major change to the facility operations.

Wastewater treatment steps used to include hydraulic splitting, oil-water separation, equalization, activated sludge bioreaction, clarification, sand filtration, and carbon adsorption. The permittee is modifying the plant to bypass the activated sludge biological reactor, clarifier, sand filters, and carbon absorbers since these treatment technologies are not needed for treating a stormwater only discharge. In the future, only the existing API separator and equalization tank will remain in service. The API separator and parallel plate separator will be modified for future operations by Buckeye.

A flow diagram of the facility treatment and wastewater sources is included at the end of the fact sheet.

Storm water discharges from DSNs 002A, 003A, 006A, 007A, and 008A are covered under NJPDES/DST permit number NJ0142549. However, stormwater flows from DSN 002A are usually routed to DSN 001C which could change in the future. If there are any questions regarding the NJPDES DST permit, please contact the Bureau of Nonpoint Pollution Control at (609) 633-7021.

## **5 Type and Quantity of the Wastes or Pollutants:**

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The Permit Summary Table near the end of this fact sheet contains a summary of the quantity and quality of pollutants treated and discharged from the facility and the proposed effluent limitations.

## **6 Summary of Permit Conditions:**

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The proposed effluent limitations and other pertinent information regarding the draft permit are described below:

### **A. Basis for Effluent Limitations and Permit Conditions - General:**

The effluent limitations and permit conditions in this permit have been developed to ensure compliance with the following, as applicable:

1. NJPDES Regulations (N.J.A.C. 7:14A),
2. New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B),
3. New Jersey's 2010 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List),
4. Requirements of the Interstate Environmental Commission (N.J.A.C. 7:9B-1.5(b)2),
5. Existing permit limitations in accordance with N.J.A.C. 7:14A-13.19 and 40 CFR 122.44 (antibacksliding requirements),
6. Permit limitations in accordance with N.J.A.C. 7:9B-1.5(d) (antidegradation requirements),
7. Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15),
8. Sludge Quality Assurance Regulations (N.J.A.C. 7:14C).

In accordance with N.J.A.C. 7:14A-13.5, Water Quality Based Effluent Limitations (WQBELs) are imposed when it has been determined that the discharge of a pollutant causes an excursion of criteria specified in the New Jersey Surface Water Quality Standards (SWQS), N.J.A.C. 7:9B-1.1 *et seq.*, and the Federal Water Quality Standards, 40 CFR Part 131. WQBELs are authorized by Section 301 of the Clean Water Act, 40 CFR 122, N.J.S.A. 58:10A-4, and N.J.A.C. 7:14A-13.2 and 13.3. The procedures used to develop WQBELs are contained in the State and Federal Standards. Specific procedures, methodologies, and equations are contained in the current USEPA "Technical Support Document for Water Quality-based Toxics Control" (TSD) (EPA- 505/2-90-001) and are referenced in N.J.A.C. 7:14A-13.5 and 13.6.

Expression of all effluent limitations is in accordance with N.J.A.C. 7:14A-13.14 and 13.15.

Whole effluent toxicity is expressed as a minimum as percent effluent.

## **B. Basis and Derivation for Effluent Limitations and Monitoring Requirements- Specific:**

The existing permit for this facility contains several loading limitations based on the ELGs at 40 CFR 419.23(f). These include the parameters BOD<sub>5</sub>, TOC, TSS, Oil and Grease, Total Chromium, Hexavalent Chromium, and Total Recoverable Phenolics. These limits were imposed on a net basis, as allowable under 40 CFR 419.23(f), to allow credit for pollutants in intake water. Additionally, effluent limitations were imposed for Sulfide and Ammonia based on the ELGs. All ELG limitations were derived using a complex formula based on refinery production rates at the facility as well as a “credit” for any stormwater or ballast water that is processed through the wastewater treatment plant.

In all instances, the Department has removed ELG based loading limits since refinery operations have ceased. Additionally, any credit for intake water, treated stormwater and treated ballast water has also been removed as these credits are no longer appropriate. However, most of these parameters have concentration limitations which, in most instances, are based on other regulatory sources. While loading limits were not premised on a straight conversion factor and flow, a calculation of loading limits based on the current concentration limits and the current flow shows that the previous loading limits are significantly greater. In other words, the concentration limits are generally more stringent than the loading limits that are being removed.

Based on the significant change in manufacturing activities, ELG loading limitations are no longer appropriate. In accordance with 40 CFR 122.44(l)(2)(i)(A), a permit may be renewed to contain a less stringent effluent limitation if material and substantial alterations to the facility occurred after permit issuance which justify the application of a less stringent effluent limitation. Removal of these limits will not cause the quality of the receiving water to fall below the levels necessary to protect the existing or designated uses.

This permit action does not authorize any increase in the concentration of pollutants above those levels authorized under the existing permit in accordance with N.J.A.C. 7:14A-13.19.

Monitoring frequencies and sample types are in accordance with N.J.A.C. 7:14A-14, unless specified otherwise in the permit. In accordance with N.J.A.C. 7:14A-14.2, the permittee may submit a written request for a modification of the permit to decrease monitoring frequencies for non-limited parameters listed in Part III if site specific conditions indicate the applicability of such a modification.

### **1. Flow:**

This permit action does not include a numerical limitation for flow. Monitoring conditions are applied pursuant to N.J.A.C. 7:14A-13.13. Monitoring for Flow-Rainfall and Duration of Discharge –Rain have been removed from the permit as they are no longer necessary due to removal of the ELG based loading limitations.

The monitoring frequency shall be **continuous** and the sample type shall be **metered**.

### **2. 5-Day Biochemical Oxygen Demand (BOD<sub>5</sub>):**

The existing permit specifies concentration limitations of a monthly average of 30 mg/L and a daily maximum of 50 mg/L. These limits were originally imposed in previous permits for the facility and are consistent with the effluent quality requirements of the Interstate Environmental Commission’s Water Quality Regulations, Section 2.05(c). Since these limitations have been historically included in the permit, they are retained in the permit action in accordance with N.J.A.C. 7:14A-13.19.

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 4 above.

The existing monitoring frequency of **two per month** is being carried forward from the existing permit. The sample type shall be **grab**.

3. Total Organic Carbon (TOC):

The existing permit specifies concentration limitations of a monthly average of 66 mg/L and a daily maximum of 110 mg/L. These limitations were originally imposed in previous permits for the facility and were premised on the ELGs at 40 CFR 419.23(f). Specifically, as noted in Section 6.A of the 2011 Fact Sheet, the ELGs at 40 CFR 419.23(f) contain production based loading limitations for the parameter of COD. It also includes a provision for the substitution of COD by TOC, where the TOC limitations imposed in a permit can be based on a ratio of 2.2 to 1 to the applicable effluent limitations for BOD<sub>5</sub>. This ratio was used as a basis to calculate and include concentration limitations for TOC. Thus, based on the BOD<sub>5</sub> concentration limitations of a monthly average of 30 mg/L and a daily maximum of 50 mg/L, TOC concentration limitations of a monthly average of 66 mg/L (30 x 2.2) and a daily maximum of 110 mg/L (50 x 2.2) were included in the permit.

The Department recognizes that the concentration limitations were based on the ELGs at 40 CFR 419, Subpart B; however, ELG limits are being removed for other parameters. While the Department is amenable to removing the loading limits for TOC, it has retained the TOC concentration limitations. TOC is an appropriate parameter for stormwater at terminals and concentration based limits are preferable to loading limits given the fluctuating nature of stormwater volume.

The existing monitoring frequency of once per week is being reduced to **twice per month** based on a change in effluent characteristics. The sample type shall be **grab**.

4. Total Suspended Solids (TSS):

The existing permit specifies concentration limitations of a monthly average of 30 mg/L and a daily maximum of 50 mg/L that were originally imposed in previous permits for the facility and are consistent with the effluent quality requirements of the Interstate Environmental Commission's Water Quality Regulations, Section 2.05(d). Since these limitations have been historically included in the permit, they are retained in the permit action in accordance with N.J.A.C. 7:14A-13.19.

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 4 above.

The existing monitoring frequency of once per week is being reduced to **twice per month** based on a change in effluent characteristics. The sample type shall be **grab**.

5. pH:

The effluent limitations a minimum of 6.0 Standard Units (SU) and a maximum of 9.0 SU are retained from the existing permit in accordance with N.J.A.C. 7:14A-13.19. These limitations are consistent with the effluent quality requirements of the Interstate Environmental Commission's Water Quality Regulations, Section 2.05(a).

The existing monitoring frequency of two per day is being reduced to **twice per month** based on a change in effluent characteristics. In accordance with N.J.A.C. 7:14A-14.2, and based on the existing permit, the sample type shall be a **grab**.

6. Temperature:

While the daily maximum temperature limit of 35 degrees Celsius is being removed in this permit action based on the discharge now consisting of primarily stormwater, the daily maximum monitoring requirement is retained for temperature from the existing permit to confirm that there no heat sources. The monitoring requirement for the monthly average has also been retained from the existing permit.

The existing monitoring frequency of two per day is being reduced to **twice per month** based on a change in effluent characteristics. In accordance with N.J.A.C. 7:14A-14.2, and based on the existing permit, the sample type shall be a **grab**.

7. Oil and Grease:

Based on N.J.A.C. 7:14A-12.8(c), and in accordance with N.J.A.C. 7:14A-13.19, the concentration limitations of a monthly average of 10 mg/L and an instantaneous maximum of 15 mg/L are retained in this permit renewal. The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 6.B above.

The existing monitoring frequency of once per week is being reduced to **twice per month** based on a change in effluent characteristics. In accordance with N.J.A.C. 7:14A-14.2, and based on the existing permit, the sample type shall be a **grab**.

8. Ammonia (Total as N):

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 6.B above. The permittee shall monitor and report for monthly average and daily maximum concentrations.

The existing monitoring frequency of once per week is being reduced to **once per month** based on a change in effluent characteristics. The sample type shall be a **grab** sample.

9. Sulfide:

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 6.B above. The permittee shall monitor and report for monthly average and daily maximum concentrations.

The existing monitoring frequency of once per week is being reduced to **once per month** based on a change in effluent characteristics. The sample type shall be a **grab** sample.

10. Total Recoverable Phenolics:

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 6.B above. The permittee shall monitor and report for monthly average and daily maximum concentrations.

The existing monitoring frequency of once per week is being reduced to **once per month** based on a change in effluent characteristics. The sample type shall be a **grab** sample.

11. Total Chromium:

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 6.B above. The permittee shall monitor and report for monthly average and daily maximum concentrations.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be a **grab** sample.

12. Hexavalent Chromium:

The loading limitations that were based on the ELGs at 40 CFR 419, Subpart B are being removed in this permit action as they are no longer applicable as explained in Section 6.B above. The permittee shall monitor and report for monthly average and daily maximum concentrations.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be a **grab** sample.

13. Total Recoverable Nickel:

The existing permit specifies loading limitations of a monthly average of 2.3 kg/day and a daily maximum of 6.4 kg/day. These limitations were originally imposed in previous permits based on the presence of nickel in the effluent. Based on effluent data and available dilution in the receiving water, Nickel was not found to be discharged at levels that would cause or have reasonable potential to cause an exceedance of the SWQS. However, since loading limitations are generally not applicable to intermittent stormwater discharges. As a result, only monitoring requirements for monthly average and daily maximum concentration have been retained from the existing permit.

The existing monitoring frequency of **once per month** is being carried forward from the existing permit. In accordance with N.J.A.C. 7:14A-14.2, the sample type shall be a **grab** sample.

14. Whole Effluent Toxicity (WET):

Section 101(a) of the Clean Water Act (CWA) establishes a national policy of restoring and maintaining the chemical, physical and biological integrity of the Nation's waters. In addition, section 101(a)(3) of the CWA and the State's SWQS at N.J.A.C. 7:9B-1.5(a)4 state that the discharge of toxic pollutants in toxic amounts is prohibited. Further, 40 CFR 122.44(d) and N.J.A.C. 7:14A-13.6(a) require that where the Department determines using site-specific WET data that a discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the SWQS, the permitting authority must establish effluent limits for WET. In order to satisfy the requirements of the CWA, the State's SWQS and the NJPDES Regulations, the need for a WQBEL for WET was evaluated for this discharge.

In order to determine the need for a WET WQBEL, the Department has analyzed all available WET effluent data. In general, an acceptable data set consists of, at a minimum, 10 data values including the most recent 2½ years of data collection. The existing permit specifies semi-annual monitoring requirements for acute WET. After review of the applicable data set, acute WET was found in quantifiable amounts in the effluent. Therefore, further analyses have been conducted for acute WET.

*Cause Analysis:*

A cause analysis was conducted in accordance with N.J.A.C. 7:14A-13.5. When the maximum effluent value (in toxic units) exceeds the applicable site specific wasteload allocation (in toxic units), the discharge is shown to cause an exceedance of the SWQS.

Using the steady state mass balance equation, acute and chronic wasteload allocations of 6.72 TU<sub>a</sub>s and 233 TU<sub>c</sub>s respectively, were developed utilizing the narrative criteria for toxic substances (general) specified in the SWQS at N.J.A.C. 7:9B, and acute and chronic dilution factors of 22.41 and 233 respectively, from the dilution study dated August 1990, titled "Critical Instream Waste Concentration Study for Amerada Hess (Port Reading) Corporation" and submitted by IT Corporation. Consistent with the recommendations of section 2.3.3 of the TSD, values of 0.3 acute toxic unit (TU<sub>a</sub>) and 1.0 chronic toxic unit (TU<sub>c</sub>) were used to interpret the narrative water quality criteria for WET contained at N.J.A.C. 7:9B-1.14(c) (see Response to Comments 13-74 through 13-89, 29 NJR 1861, (May 5, 1997)).

Effluent data for the time period of August 2009 through February 2014 was utilized for this analysis and constitutes four data points.

Review of the acute WET data set indicates the maximum effluent data value to be 1.36 TU<sub>a</sub>s (i.e. an LC50 = 74 %). Since the maximum reported effluent data value does not exceed the applicable site specific wasteload allocation of 6.72 TU<sub>a</sub>s, the discharge does not cause an exceedance of the acute interpretation of the narrative criteria for WET identified in the SWQS.

*Reasonable Potential to Cause:*

A reasonable potential to cause analysis was conducted in accordance with N.J.A.C. 7:14A-13.5. When the projected maximum effluent value (in toxic units) exceeds the applicable site specific wasteload allocation (in toxic units), the discharge is shown to have reasonable potential to cause or contribute to an exceedance of the SWQS. The projected maximum effluent value was calculated utilizing the procedures specified in section 3.0 of the TSD.

For this analysis, the acute reasonable potential multiplying factor (R.P.M.F.) of 1.11 was based on the 10 data values, a site-specific coefficient of variation (CV) of 0.11, a 95% confidence level and a 95% probability basis (refer to Table 3.1 of the TSD). Multiplying the R.P.M.F. with the maximum data value of 1.36 TU<sub>a</sub>s from the above cause analysis results in a projected maximum data value of 1.51 TU<sub>a</sub>s. Since the projected maximum data value does not exceed the applicable site specific wasteload allocation of 6.72 TU<sub>a</sub>s, the discharge does not have reasonable potential to cause an exceedance of the acute interpretation of the narrative criteria for WET identified in the SWQS.

*Water Quality Based Effluent Limitation Derivation:*

Since the discharge was not found to cause or have reasonable potential to cause an exceedance of the acute interpretation of the narrative criteria for WET identified in the SWQS, no new WQBELs have been calculated in the permit renewal.

However, the existing permit specifies an acute WET action level of an LC50  $\geq$  50%, which is being carried forward in this permit action in accordance with N.J.A.C. 7:14A-13.19.

The TRIR are included in accordance with N.J.A.C. 7:14A-13.17(a), 7:14A-6.2(a)5 and the recommendations in Section 5.8 of the TSD. The requirements are necessary to ensure compliance with the applicable WET action level and to expedite compliance with the WET action level should exceedances occur. As included in section B.1 of the TRIR requirements, the initial step of the TRIR is to identify the variability of the effluent toxicity and to verify that a consistent toxicity problem does in fact exist.

The test species method to be used for acute testing shall be the *Mysidopsis bahia* 96 hour definitive test. Such selection is based on the saline characteristics of the receiving stream, the existing permit, N.J.A.C. 7:9B-1.5 and N.J.A.C. 7:18, the Regulations Governing the Certification of Laboratories and Environmental Measurements (N.J.A.C. 7:18).

Effluent samples for conducting **acute WET** testing are to be collected after the last treatment step, consistent with the collection location for all other parameters. Based on the existing permit, the monitoring frequency shall be **semi-annual** and the sample type shall be a **composite** sample.

15. Toxic Metals, Organic Compounds, and Cyanide:

In accordance with N.J.A.C. 7:14A-13.6(a), a WQBEL shall be imposed when the Department determines pursuant to N.J.A.C. 7:14A-13.5 that the discharge of a pollutant causes an excursion above a SWQS. The SWQS at N.J.A.C. 7:9B specify acute and chronic criteria for the protection of aquatic life as well as human

health criteria in saline waters for several toxic pollutants including Acids, Base/Neutrals, Metals, Pesticides, and Volatiles.

In order to determine the need for toxic pollutant specific WQBELs, the Department has analyzed all available effluent data. Acceptable data sets generally consist of, at a minimum, 10 data values including the most recent 2½ years of data collection. A pollutant is considered discharged in “quantifiable amounts” when an exact amount of that pollutant is measured equal to or above the detection level reported by a laboratory analysis (refer to the latest version of the “NJPDES Monitoring Report Form Reference Manual,” which can be accessed at [http://www.state.nj.us/dep/dwq/pdf/MRF\\_Manual.pdf](http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf)).

The existing permit specifies annual monitoring requirements for Metals, Base/Neutrals, Pesticides, and Volatiles. Methyl tert-butyl ether (MTBE), Benzene, Toluene, Ethylbenzene, Zinc, TBA, and Xylenes were monitored on a semi-annual basis.

Based on a review of these data sets, the Department has concluded the following:

The following pollutants were found to be detected in the effluent a minimum of four times out of a minimum of nine samples during the time period of February 2009 through March 2014. Following are the detected values during that time period:

Parameter	Results, ug/L	Parameter	Results, ug/L
Antimony	29.2, 127, 79.7, 753, 154, 7.1	Manganese	180, 161, 140, 192, 157, 112, 121, 89.6, 137
Arsenic	7.2, 3.9, 25.1, 10, 4.2	MTBE	5.5, 9.0, 1.6, 27.8, 4.0, 1.6, 2.6, 2.3, 1.5, 0.45, 3.7, 0.67, 1.1, 5.1
Benzene	0.64, 1.7, 0.38, 0.49	Selenium	11.3, 12.2, 28.5, 29.9, 18.8, 20.8, 17.1
Bis-2 Ethylhexyl Phthalate	2.0, 26.9, 26.9, 5.8	Toluene	4.9, 0.68, 0.81, 1.1, 0.88
Chloroform	0.98, 0.4, 1.2, 1.6, 1.3	Xylenes	2.7, 1.6, 6.9, 2.3, 0.51, 8.9, 3.5, 0.49
Cyanide	58, 39, 31, 29, 25	Zinc	74.7, 74.9, 93, 25.2, 124, 133, 66.4, 33.5, 30.4, 104
Lead	3.3, 4.4, 4.0, 25.9		

Since the facility is in the process of decommissioning the refinery resulting in effluent and treatment changes, the Department has determined that a WQBEL analysis using this data is not appropriate at this time. Rather, it is preferable to re-evaluate what parameters are being detected in the effluent once all changes have been completed at the facility. Most notably, current effluent data is for treated process wastewater whereas future effluent will consist solely of treated stormwater. Therefore, the existing monitoring and reporting requirements have been retained in this permit action based on N.J.A.C. 7:14A-13.5(k)3 and the need to re-evaluate the necessity for WQBELs upon renewal of the permit.

However, based on the detected values for the parameters shown in the table above, arsenic, bis-2 Ethylhexyl phthalate, manganese, and zinc showed values that were above the SWQS. Therefore, the Department has imposed monitoring for these parameters at a frequency of **monthly** to determine if these parameters are a concern in the stormwater only discharge. These four parameters shall be reported on the DMR. Although there was one data point above the SWQS for both antimony and lead, they have been determined to be outliers by the Department and the frequency for these two parameters shall remain at **annual**.

The monitoring requirements are summarized in the following table:



Parameters	Monitoring Frequencies
Arsenic, Bis-2 Ethylhexyl Phthalate, Manganese, Zinc	Monthly
MTBE, Benzene, Ethylbenzene, Toluene, Xylenes	Semi-Annual
Tertiary Butyl Alcohol (TBA)	Semi-Annual
Antimony, Beryllium, Cadmium, Copper, Cyanide, Lead, Mercury, Selenium, Silver, Thallium, Acids, Base/Neutrals, Pesticides, and Volatiles	Annual

**Sample types:**

The sample type shall be a **grab** for the **Metals, Acids, Base/Neutrals, Pesticides, Asbestos, Cyanide, and Volatiles**. Consistent with the intent of 40 CFR 122.45(c) and N.J.A.C. 7:14A-13.14(b), monitoring data for toxic metals shall be expressed as total recoverable.

**C. Recommended Quantitation Levels Policy (RQLs):**

The Department developed the RQLs to insure that useful data is provided to the Department in order to characterize the discharger's effluent. The Department recommends that the permittee achieve detection levels that are at least as sensitive as the RQLs found in Part III. The Department has determined that the quantitation levels listed therein can be reliably and consistently achieved by most state certified laboratories for most of the listed pollutants using the appropriate procedures specified in 40 CFR Part 136. **FAILURE TO ATTAIN A QUANTITATION LEVEL AS SENSITIVE AS A LISTED RQL IS NOT A VIOLATION OF THE PERMIT, BUT DOES TRIGGER SOME ADDITIONAL REPORTING REQUIREMENTS FOR THE PERMITTEE AS SPECIFIED IN PART IV OF THE PERMIT.**

**D. Reporting Requirements:**

All data requested to be submitted by this permit shall be reported on the Discharge Monitoring Reports (DMRs), Waste Characterization Reports (WCR) as appropriate and submitted to the Department as required by N.J.A.C. 7:14A-6.8(a).

**E. General conditions:**

In accordance with N.J.A.C. 7:14A-2.3 and 6.1(b), specific rules from the New Jersey Administrative Code have been incorporated either expressly or by reference in Part I and Part II.

**F. Operator Classification Number:**

The operator classification requirement is no longer included in the permit. To obtain or determine the appropriate licensed operator classification for the treatment works specified, the permittee shall contact the Bureau of Licensing and Pesticide Operations at (609) 984-6507.

**G. Flow Related Conditions:**

This facility is located in the area covered by the Lower Raritan/Middlesex Water Quality Management Plan.

**H. Residuals/Sludge Conditions:**

Analysis of the industrial sludge for most of the parameters found on Table III-B-1 of Part III is required because they were detected in previous sludge quality monitoring data submitted to the Department under the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C) or are otherwise expected to be present in the sludge generated at the facility. The frequency of monitoring is dependent on the amount of sludge produced. Since the amount of sludge generated is less than 290 dry metric tons per year the frequency of monitoring is annually. This monitored

location (SI6A) will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

Monitored location SIB6 was added to address residuals generated from the API Separator. An annual Residuals Transfer Report (RTR) is required to be submitted.

All treatment works with a discharge regulated under N.J.A.C. 7:14A must have permits that implement applicable technical standards for residuals management. Generally, the permit issued to the treatment works generating the residual will include applicable residual quality monitoring as well as other general conditions required by N.J.A.C. 7:14A-6. In addition, the permit may include conditions related to any aspect of residual management developed on a case-by-case basis where the Department determines that such conditions are necessary to protect public health and the environment.

The permit may also include conditions establishing requirements for treatment works that send residual to other facilities for final use or disposal. Thus, **ALL** residual preparers (that is, generators as well as persons who manage the residual) are required to submit basic information concerning their residual use and disposal practices. This basic information is submitted by compliance with the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C).

The documents listed below have been used to establish the residual conditions of the Draft Permit:

- a. United States Environmental Protection Agency "Standards for the use or disposal of sewage sludge" (40 CFR Part 503),
- b. "New Jersey Pollutant Discharge Elimination System" (N.J.A.C. 7:14A),
- c. Technical Manual for Residuals Management, May 1998,
- d. USEPA Part 503 Implementation Guidance, EPA 833-R-95-001, October 1995. This document is a compilation of federal requirements, management practices and EPA recommended permit conditions for sewage sludge use and management practices,
- e. USEPA A Plain English Guide to the EPA Part 503 Biosolids Rule, EPA/832/R-93/003, September 1994,
- f. New Jersey "Statewide Sludge Management Plan", January 2006 and
- g. New Jersey "Sludge Quality Assurance Regulations" (SQAR), N.J.A.C. 7:14C.

#### **I. Polychlorinated Biphenyl (PCB) Sampling and Pollutant Minimization Plan (PMP) Requirements:**

The permittee has completed sampling for PCBs as required in a previous permit action. The Department is currently reviewing the sampling data for this and other facilities to determine which facilities are discharging at elevated levels. Once the Department completes this review and if the permittee's effluent is discharging PCBs at elevated levels, the Department will require the permittee to develop and submit a PMP for approval within 12 months from the effective date of the permit action the requirement is incorporated in.

The Department has developed a PMP Technical Manual to help permittees with the development of the PMP, which can be found on the Department's web site at <http://www.state.nj.us/dep/dwq/techman.htm>.

If based on the monitoring for PCBs, it is determined that the permittee must develop and implement a PCB PMP, the permittee will be required to submit an Annual PMP Progress Report. These reports will be used to update the Department regarding any revisions to the PMP, measures taken to achieve reductions, and changes to the baseline loading.

These conditions have been incorporated into the permit at Part IV, Section D.

## 7 Variances to Permit Conditions:

To date, the Department has not received a variance request from the permittee.

## 8 Description of Procedures for Reaching a Final Decision on the Draft Action:

Please refer to the procedures described in the public notice that is part of the draft permit. The public notice for this permit action is published in the *Home News Tribune* and in the DEP Bulletin.

## 9 Contact Information

If you have any questions regarding this permit action, please contact Robert Hall of the Bureau of Surface Water Permitting at (609) 292-4860.

## 10 Calculation Equations:

A. Wasteload Allocation:  $WLA = C_i \times Df - C_{up}(Df - 1)$

where, WLA = wasteload allocation  
 $C_i$  = instream surface water criteria (from N.J.A.C. 7:9B)  
 $C_{up}$  = upstream concentration  
 $Df$  = dilution factor

B. Long Term Average:  $LTA = (WLA) \times [WLA \text{ multiplier (LTA)}]$

where, LTA = long term average  
 WLA = wasteload allocation  
 WLA multiplier (LTA) = wasteload allocation multiplier for long term average, the 99th percentile multiplier, (see Table 5-1 in TSD, page 102)

C. Maximum Daily Limitation:  $MDL = (LTA) \times [LTA \text{ multiplier (MDL)}]$

where, MDL = maximum daily limitation  
 LTA = long term average  
 LTA multiplier (MDL) = long term average multiplier for the maximum daily limitation, the 99th percentile multiplier, (see Table 5-2 in TSD, page 103)

D. Average Monthly Limitation:  $AML = (LTA) \times [LTA \text{ multiplier (AML)}]$

where, AML = average monthly limitation  
 LTA = long term average  
 LTA multiplier (AML) = long term average multiplier for the average monthly limitation, the 99th percentile multiplier, (see Table 5-2 in TSD, page 103)

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Permit Summary Table

Unless otherwise noted, all effluent limitations are expressed as maximums. Dashes (--) indicate there is no effluent data, no limitations, or no monitoring for this parameter depending on the column in which it appears.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA (1) 1/2012-7/2014	EXISTING LIMITS	FINAL LIMITS
Flow	MGD	Monthly Avg. Daily Max.	0.74 2.74	MR MR	MR MR
Flow - Rainfall	MGD	Monthly Avg. Daily Max.	0.58 1.08	MR MR	-- --
Duration of Discharge - Rain	# of days	Monthly Total	9.94	MR	--
Effluent Temperature	°C	Monthly Avg. Daily Max.	21.32 35	MR 35	MR MR
Effluent pH	S.U.	Instant Min. Instant Max.	6.3 8.8	6.0 9.0	6.0 9.0
5 Day Biochemical Oxygen Demand (BOD <sub>5</sub> ) Effluent Gross	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	62.2 1162 15/16	MR MR	-- --
5 Day Biochemical Oxygen Demand (BOD <sub>5</sub> ) Effluent Gross	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	18.27 260 15/16	30 50	30 50
5 Day Biochemical Oxygen Demand (BOD <sub>5</sub> ) Effluent Net*	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	59.86 1162 14/17	187 338	-- --
Total Organic Carbon (TOC) Effluent Gross	kg/d	Monthly Avg. Daily Max.	37.69 342	MR MR	-- --
Total Organic Carbon (TOC) Effluent Gross	mg/L	Monthly Avg. Daily Max.	12.65 105	66 110	66 110
Total Organic Carbon (TOC) Effluent Net*	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	33.56 342 25/6	411 743	-- --
Total Suspended Solids (TSS) Effluent Gross	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	23.89 174 27/4	MR MR	-- --
Total Suspended Solids (TSS) Effluent Gross	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	8.56 73 27/4	30 50	30 50
Total Suspended Solids (TSS) Effluent Net*	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	20.32 170 25/6	151 234	-- --
Oil and Grease Effluent Gross	kg/d	Monthly Avg. Instant Max. # Det. / # N.D.	0.01 0.84 1/27	MR MR	-- --
Oil and Grease Effluent Gross	mg/L	Monthly Avg. Instant Max. # Det. / # N.D.	< 5.0 - <6.0 < 5.0 - <6.0 0/28	10 15	10 15
Oil and Grease Effluent Net*	kg/d	Monthly Avg. Instant Max. # Det. / # N.D.	<10 - <47.9 <10 - <47.9 0/28	54 101	-- --
Ammonia (Total as N) Effluent Gross	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	1.48 166 28/3	102 255	-- --

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA (1) 1/2012-7/2014	EXISTING LIMITS	FINAL LIMITS
Ammonia (Total as N) Effluent Gross	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR
Sulfide Effluent	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	0.47 2.44 7/24	0.98 2.16	-- --
Sulfide Effluent	ug/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR
Total Chromium Effluent Gross	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	<0.001 - <0.07 <0.001 - <0.07 0/31	MR MR	-- --
Total Chromium Effluent Gross	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	<10 <10 0/31	MR MR	MR MR
Total Chromium Effluent Net*	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	<0.001 - <0.07 <0.001 - <0.07 0/31	1.71 4.93	-- --
Total Chromium Effluent Net*	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	<10 <10 0/31	MR MR	-- --
Chromium, Hexavalent Effluent Gross	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	<0.001 - <0.07 <0.001 - <0.07 0/31	MR MR	-- --
Chromium, Hexavalent Effluent Gross	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	<10 <10 0/31	MR MR	MR MR
Chromium, Hexavalent Effluent Net*	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	<0.001 - <0.07 <0.001 - <0.07 0/31	0.14 0.32	-- --
Chromium, Hexavalent Effluent Net*	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	<10 <10 0/31	MR MR	-- --
Total Recoverable Phenolics Effluent Gross	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	0.07 1.12 21/8	MR MR	-- --
Total Recoverable Phenolics Effluent Net*	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	0.04 0.96 21/8	1.2 2.52	-- --
Total Recoverable Phenolics Effluent Gross	ug/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR
Nickel, Total Recoverable	kg/d	Monthly Avg. Daily Max. # Det. / # N.D.	0.26 2.6 27/4	2.3 6.4	MR MR
Nickel, Total Recoverable	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	140.78 1096 27/4	MR MR	MR MR
Arsenic, Total Recoverable	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	10.08 25.1 5/4	MR MR	MR MR
Bis 2 Ethylhexhyl Phthalate	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	15.4 26.9 4/5	MR MR	MR MR

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA (1) 1/2012-7/2014	EXISTING LIMITS	FINAL LIMITS
Manganese, Total Recoverable	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	143.3 192 9/0	MR MR	MR MR
Zinc, Total Recoverable	ug/L	Monthly Avg. Daily Max. # Det. / # N.D.	75.9 133 10/1	MR MR	MR MR
Acute Toxicity, LC50	% Effluent	Minimum	88.9 (3 data points) >100 (1 data point)	MR (2)	MR (2)

**Footnotes and Abbreviations:**

MR Monitor and report only

- (1) This data represents treated effluent that is representative of former refinery processes. Specifically, wastewater components included remediation wastewater, cooling tower blowdown, storage tank water bottoms, API sludge filtrate, and equalization tank sludge filtrate/cleanout wastewater. stormwater, as well as any water being used to clean up the facility during demolishing and decommissioning of the refinery and WWTP. This data is not representative of the effluent that will be discharged under this permit in the future as only stormwater will be discharged.
- (2) The permittee shall maintain acute WET levels under the Action Level of  $LC50 \geq 50\%$ .

The following items are used to establish the basis of the Draft Permit:

Rules and Regulations:

1. 33 U.S.C. 1251 et seq., Federal Water Pollution Control Act. [C]
2. 40 CFR Part 131, Federal Water Quality Standards. [A] [C]
3. 40 CFR Part 122, National Pollutant Discharge Elimination System. [C]
4. N.J.S.A. 58:10A-1 et seq., New Jersey Water Pollution Control Act. [A] [B]
5. N.J.A.C. 7:14A-1 et seq., New Jersey Pollutant Discharge Elimination System Regulations. [A] [B]
6. N.J.A.C. 7:9B-1 et seq., New Jersey Surface Water Quality Standards. [A] [B]
7. N.J.A.C. 7:15, Statewide Water Quality Management Planning Rules. [A] [B]
8. N.J.A.C. 7:14C, Sludge Quality Assurance Regulations. [B]
9. Interstate Environmental Commission Regulations, N.J.S.A. 32:18-1 et seq.

Guidance Documents / Reports:

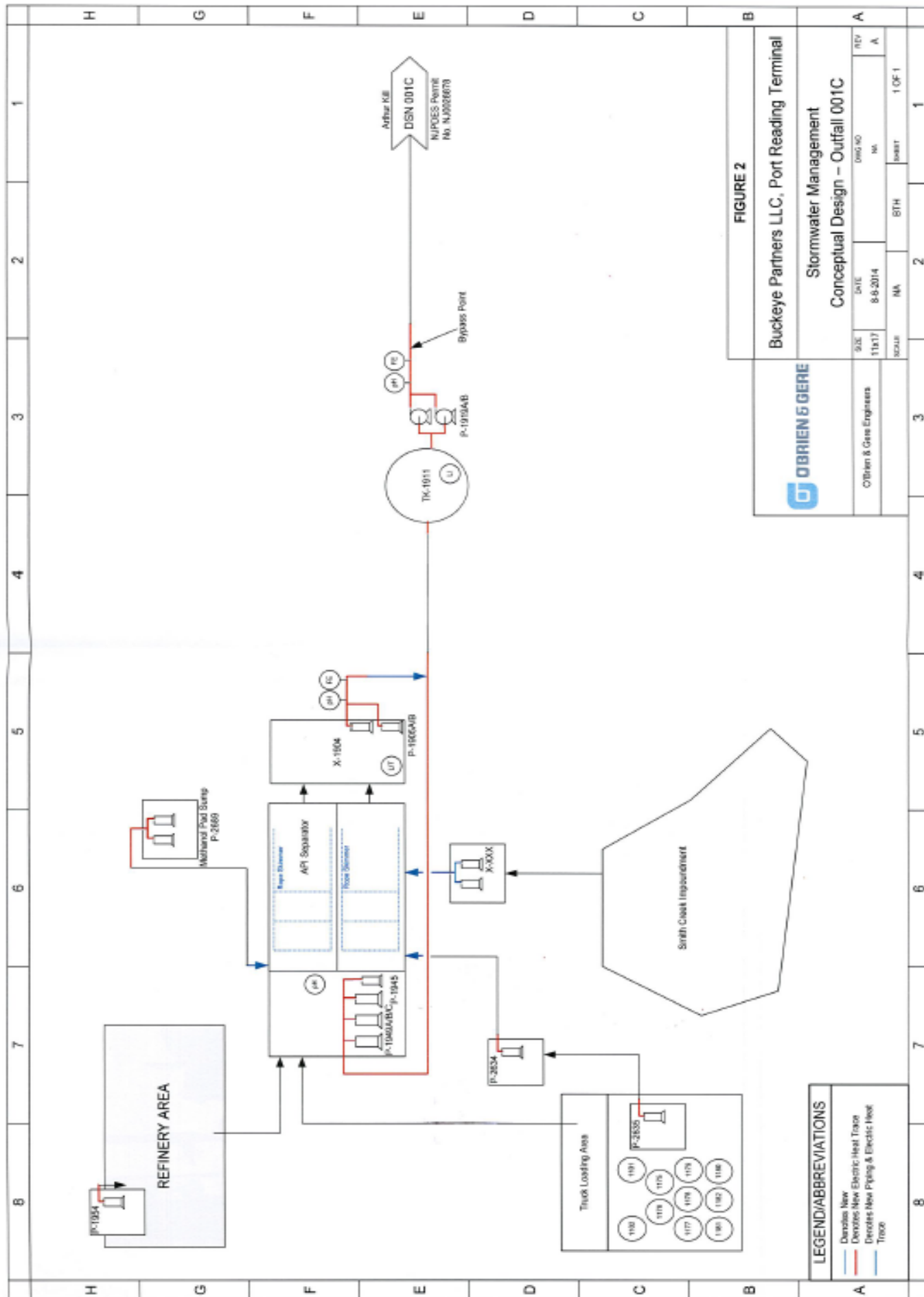
1. "Field Sampling Procedures Manual", published by the NJDEP. [A]
2. "NJPDES Monitoring Report Form Reference Manual", updated December 2007, and available on the web at [http://www.state.nj.us/dep/dwq/pdf/MRF\\_Manual.pdf](http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf).
3. "EPA Technical Support Document for Water Quality-based Toxics Control", EPA/505/2-90-001, March 1991. [A]
4. New Jersey's 2010 Integrated Water Quality Monitoring and Assessment Report (includes 305 (b) Report 303(d) List). [A] [B]
5. Dilution Study dated August 1990, titled "Critical Instream Waste Concentration Study for Amerada Hess (Port Reading) Corporation" and submitted by IT Corporation.
6. Discharge Monitoring Report (DMR) data for the time period of January 2012 through July 2014.
7. Wastewater Characterization Report (WCR) data for the time period of February 2009 through March 2014.

Permits / Applications:

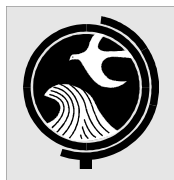
1. NJPDES/DSW Permit Application dated September 12, 2008. [A]
2. Existing NJPDES/DSW Permit NJ0028878, issued December 5, 2011 and effective April 1, 2012. [A]
3. Major Modification to NJPDES/DSW Permit NJ0028878, issued October 19, 2007 and effective December 1, 2007 to incorporate monitoring requirements for PCBs. [A]
4. Correspondence from Deborah M. Watkins, P.E. of O'Brien & Gere Engineers to Bela Mankad of the Department dated June 17, 2014 requesting a revoke and reissue permit action of Permit Number Nj0028878 due to a change in facility operations.

Footnotes:

- [A] Denotes items that may be found in the NJPDES/DSW Administrative Record Library located in the NJDEP Central File Room, 401 East State Street, Trenton, New Jersey.
- [B] Denotes items that may be found on the New Jersey Department of Environmental Protection (NJDEP) website located at "<http://www.state.nj.us/dep/>".
- [C] Denotes items that may be found on the United States Environmental Protection Agency (USEPA) website at "<http://www.epa.gov/>".







# NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

**Permit Number: NJ0028878**

**Draft: Surface Water Revoke & Reissue Permit Action**

**Permittee:**

Buckeye Terminal LLC  
750 Cliff Road  
Port Reading, NJ 07064

**Co-Permittee:**

**Property Owner:**

Buckeye Terminal LLC  
750 Cliff Road  
Port Reading, NJ 07064

**Location Of Activity:**

Buckeye Terminal LLC  
750 Cliff Road  
Woodbridge, Middlesex County

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
B – Industrial Wastewater – Revoke/Reissue			

**By Authority of:**  
**Commissioner's Office**

**DEP AUTHORIZATION**  
**Pilar Patterson, Chief**  
**Bureau of Surface Water Permitting**  
**Division of Water Quality**

(Terms, conditions and provisions attached hereto)

**Division of Water Quality**

## PART I GENERAL REQUIREMENTS: NJPDES

### A. General Requirements of all NJPDES Permits

#### 1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
  - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
  - Incorporation by Reference N.J.A.C. 7:14A-2.3
  - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
  - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
  - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
  - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
  - Enforcement Action N.J.A.C. 7:14A-2.9
  - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
  - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
  - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
  - Severability N.J.A.C. 7:14A-2.2
  - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
  - Permit Actions N.J.A.C. 7:14A-2.7(c)
  - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
  - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
  - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
  - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
  - Fee Schedule N.J.A.C. 7:14A-3.1
  - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
  - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
  - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
  - Monitoring N.J.A.C. 7:14A-6.5
  - Recordkeeping N.J.A.C. 7:14A-6.6
  - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
  - Planned Changes N.J.A.C. 7:14A-6.7
  - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
  - Noncompliance Reporting
    - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
    - Written Reporting N.J.A.C. 7:14A-6.10(c) & (d)
    - Duty to Provide Information N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
  - Schedules of Compliance N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
  - Transfer N.J.A.C. 7:14A-6.4
  - N.J.A.C. 7:14A-6.2(a)8 & 16.2

## **PART II**

# **GENERAL REQUIREMENTS: DISCHARGE CATEGORIES**

### **A. Additional Requirements Incorporated By Reference**

#### **1. Requirements for Discharges to Surface Waters**

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
  - i. Surface Water Quality Standards N.J.A.C. 7:9B-1
  - ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

### **B. General Conditions**

#### **1. Scope**

- a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

#### **2. Permit Renewal Requirement**

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application: 180 days before the Expiration Date.

#### **3. Notification of Non-Compliance**

- a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).
- b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

#### **4. Notification of Changes**

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

#### **5. Access to Information**

- a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

## 6. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
  - i. Notifications shall be submitted to:  
NJDEP  
Bureau of Licensing and Pesticide Operations  
Mailcode 401-04E  
P.O. Box 420  
Trenton, New Jersey 08625-0420  
(609)984-6507.
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

## 7. Operation Restrictions

- a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condition for water or waste, except as specifically authorized by a valid NJPDES permit.

## 8. Residuals Management

- a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:
  - i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;
  - ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
  - iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
  - iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
  - v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
  - vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
  - vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)

- b. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.
- c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.
- d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.
- e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C. 7:14A-20.7(j).
- f. The preparer who provides residual to another person who further prepares the residual for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.
- g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to submit to the Department written proof of compliance with or satisfaction of all applicable statutes, regulations, and guidelines of the state in which land application will occur.

## PART III

# LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

001C Surface Water Outfall

RECEIVING STREAM:

Arthur Kill

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

**Location Description**

Effluent sampling for all parameters shall be at the last sampling port after final treatment at DSN001C, which discharges into the Arthur Kill at Lat. 40d 33' 27.1" and Long. 74d 14' 32.8".

**Contributing Waste Types**

Storm Water Runoff

**Surface Water DMR Reporting Requirements:**

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

**Comments:**

Effluent discharged from DSN 001C consists of stormwater flows from the truck loading area, the former refinery area, various tank fields, DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas, and overflow from the Smith Creek Impoundment.

**Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Effluent Gross Value	*****	*****	*****	*****	30 Monthly Average	50 Daily Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	30 Monthly Average	50 Daily Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			

**Surface Water DMR Reporting Requirements:**

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**Comments:**

Effluent discharged from DSN 001C consists of stormwater flows from the truck loading area, the former refinery area, various tank fields, DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas, and overflow from the Smith Creek Impoundment).

**Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil & Grease Tot Rec Hexane Extraction	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Daily Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	AL	***	***		50	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	DEG.C	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Carbon, Tot Organic (TOC)	Effluent Gross Value	*****	*****	*****	*****	66 Monthly Average	110 Daily Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Sulfide, Total (as S)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Manganese, Total Recoverable	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

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**Comments:**

Effluent discharged from DSN 001C consists of stormwater flows from the truck loading area, the former refinery area, various tank fields, DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas, and overflow from the Smith Creek Impoundment).

**Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Phenolics, Total Recoverable	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Arsenic, Total Recoverable (as As)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	***	***		***	8	8			
Chromium, Hexavalent (as Cr)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	***	***		***	10	10			
Chromium, Total (as Cr)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	***	***		***	10	10			
Nickel, Total Recoverable	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	***	***		***	10	10			
Zinc, Total Recoverable	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	***	***		***	30	30			



**Surface Water DMR Reporting Requirements:**

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

**Comments:**

Effluent discharged from DSN 001C consists of stormwater flows from the truck loading area, the former refinery area, various tank fields, DSN 002A water (stormwater runoff from parking and non-production equipment laydown areas, and overflow from the Smith Creek Impoundment).

**Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**

PHASE:Final		PHASE Start Date:		PHASE End Date:						
Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	***	***		***	30	30			

**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE:Final		PHASE Start Date:		PHASE End Date:							
Parameter	Sample Point	Compliance Quantity		Units	Sample Type	Monitoring Period					
Cyanide, Total (as CN)	Effluent Gross Value	REPORT RQL = 40		UG/L	Grab	January thru December					
Selenium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10		UG/L	Grab	January thru December					
Thallium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10		UG/L	Grab	January thru December					
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT RQL = 20		UG/L	Grab	January thru December					

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**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Silver, Total Recoverable	Effluent Gross Value	REPORT RQL = 2	UG/L	Grab	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT RQL = 4	UG/L	Grab	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Copper, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Mercury Total Recoverable	Effluent Gross Value	REPORT RQL = 1	UG/L	Grab	January thru December
Acenaphthylene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Acenaphthene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Grab	January thru December
Anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT RQL = 26.5	UG/L	Grab	January thru December
Bis (2-chloroiso- propyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December

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**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Butyl benzyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Chrysene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Diphenylhydrazine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Fluoranthene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Fluorene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Hexachlorocyclopentadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Hexachloroethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Isophorone	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
N-nitrosodiphenylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
N-nitrosodimethylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Nitrobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December

**Surface Water WCR - Annual Reporting Requirements:**

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**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Phenanthrene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,2,4-Trichloro-benzene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Dibenzo(a,h)anthracene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Grab	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Grab	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT RQL = 60	UG/L	Grab	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Grab	January thru December

**Surface Water WCR - Annual Reporting Requirements:**

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**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Naphthalene	Effluent Gross Value	REPORT RQL = 8	UG/L	Grab	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
Benzidine	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Malathion	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Demeton	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Mirex	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
1,2,4,5-Tetrachloro-benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiethyl-amine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT RQL = 8	UG/L	Grab	January thru December

**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Chloroform	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Tetrachloroethylene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Trichlorofluoro-methane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT RQL = 23.5	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December

**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2-Dichloropropane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Trichloroethylene	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Methoxychlor	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parathion	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Grab	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT RQL = 0.08	UG/L	Grab	January thru December

**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Beta Endosulfan	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Grab	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Grab	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT RQL = 0.1	UG/L	Grab	January thru December
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT RQL = 0.06	UG/L	Grab	January thru December
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Grab	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Grab	January thru December
Aldrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Grab	January thru December
Alpha BHC	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Grab	January thru December
Beta BHC	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Grab	January thru December
Gamma BHC (lindane),	Effluent Gross Value	REPORT RQL = 0.03	UG/L	Grab	January thru December
Chlordane	Effluent Gross Value	REPORT RQL = 0.2	UG/L	Grab	January thru December
Dieldrin	Effluent Gross Value	REPORT RQL = 0.03	UG/L	Grab	January thru December
Endosulfans, Total (alpha and beta)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Endrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Grab	January thru December



**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Toxaphene	Effluent Gross Value	REPORT RQL = 1	UG/L	Grab	January thru December
Heptachlor	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Grab	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT RQL = 0.4	UG/L	Grab	January thru December
Chlorpyrifos	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT RQL = 18	UG/L	Grab	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT RQL = 13.5	UG/L	Grab	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT RQL = 40	UG/L	Grab	January thru December
2,4,6-Trichloro-phenol	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 21	UG/L	Grab	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT RQL = 12	UG/L	Grab	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT RQL = 60	UG/L	Grab	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT RQL = 30	UG/L	Grab	January thru December

**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Guthion	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

**Surface Water WCR - Semi Annual Reporting Requirements:**

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements**

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Methyl tert-butyl Ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December

**Surface Water WCR - Semi Annual Reporting Requirements:**  
Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

**Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements**  
**PHASE:**Final                      **PHASE Start Date:**                      **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Xylenes (Total)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Tertiary Butyl Alcohol (TBA)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

MONITORED LOCATION:  
SI6A Sludge Dewatering Tanks

DISCHARGE CATEGORY(IES):  
B - Industrial Wastewater

#### Location Description

Annually, a representative sample of the thickened sludge removed for use or disposal shall be obtained and analyzed pursuant to the Sludge Quality Assurance Regulations (SQAR, N.J.A.C. 7:14C).

#### Contributing Waste Types

Ind Residual-Other

#### Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

#### Comments:

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**

PHASE:Final		PHASE Start Date:		PHASE End Date:				Units	Frequency	Sample Type
Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit			
Nitrate Nitrogen, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nitrogen, Kjeldahl Total, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Sulfide, Total (as S)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**

PHASE:Final		PHASE Start Date:		PHASE End Date:				Units	Frequency	Sample Type
Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit			
Magnesium Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Barium, Total (as Ba)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Boron, Total (as B)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Manganese, Total (as Mn)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Vanadium, Total (as V)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Titanium, Total (as Ti)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Molybdenum Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Phosphorus Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Arsenic, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Cobalt, Total (as Co)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Silver, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Antimony, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Aluminum, Total (as Al)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Selenium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Thallium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Copper, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Beryllium Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Cadmium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Zinc, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Lead, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nickel, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Mercury, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chromium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Iron, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Acenaphthylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Acenaphthene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Anthracene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			



**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:Final****PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Benzo(k)fluoranthene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzo(a)pyrene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-chloroethyl) ether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-chloroethoxy)- methane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-chloroiso- propyl)-ether,Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Butyl benzyl- phthalate, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chrysene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**

PHASE:Final		PHASE Start Date:		PHASE End Date:				Units	Frequency	Sample Type
Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit			
Diethyl phthalate, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Dimethyl phthalate, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Diphenyl- hydrazine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Fluoranthene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Fluorene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachlorocyclo- pentadiene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachloroethane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:Final****PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Indeno(1,2,3-cd)-pyrene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
N-nitrosodi-n-propylamine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
N-nitrosodi-phenylamine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Naphthalene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nitrobenzene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Phenanthrene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Pyrene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:Final****PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Benzo(ghi)perylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzo(a)anthracene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Dichlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2,4-Trichloro- benzene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Dibenzo(a,h) anthracene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,3-Dichlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,4-Dichlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:Final****PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
2-Chloronaphthalene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Di-n-octyl Phthalate Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
2,4-Dinitrotoluene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
2,6-Dinitrotoluene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
3,3'-Dichloro- benzidine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
4-Bromophenyl phenyl ether, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-ethylhexyl) phthalate, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Di-n-butyl phthalate Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzidine Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachlorobutadiene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
trans-1,3-Dichloro- propene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
3,4 Benzo- fluoranthene	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methyl tert-butyl Ether	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Acrolein, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Acrylonitrile Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bromoform Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Carbon Tetrachloride Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chlorodibromomethane Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chloroethane Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Chloroform Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Dichlorobromomethane Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Ethylbenzene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methyl Bromide, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methyl Chloride, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methylene Chloride, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Tetrachloroethylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			



**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Toluene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Trichloroethylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Vinyl Chloride Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1-Dichloroethane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1-Dichloroethylene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1,1-Trichloro-ethane, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1,2-Trichloro-ethane, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:Final****PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
1,1,2,2-Tetrachloro-ethane	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Dichloroethane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Dichloropropane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-trans-Dichloro ethylene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
2-Chloroethyl Vinyl Ether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Xylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Tertiary Butyl Alcohol (TBA)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals DMR Reporting Requirements:**

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

**Comments:**

This Monitored Location will be deactivated upon removal of all residuals from the wastewater treatment plant and notification to the Department from the permittee that all residuals have been removed.

**Table III - B - 1: Residuals DMR Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Cyanide, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Isophorone Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Phenol, Single Compound, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
4-Chlorophenyl phenyl ether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

**Residuals WCR - Annual Reporting Requirements:**

Submit an Annual WCR: due 60 calendar days after the end of each calendar year.

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**Table III - B - 3: Residuals WCR - Annual Limits and Monitoring Requirements****PHASE:**Final**PHASE Start Date:****PHASE End Date:**

<b>Parameter</b>	<b>Sample Point</b>	<b>Compliance Quantity</b>	<b>Units</b>	<b>Sample Type</b>	<b>Monitoring Period</b>
Amt Sludge Rmvd, Wet Cubic Yards	Industrial Residuals	REPORT	WCY/YR	Calculated	January thru December
Amt Sludge Rmvd, Wet Metric Tons	Industrial Residuals	REPORT	WMT/YR	Calculated	January thru December
Amt Sludge Rmvd, Gallons	Industrial Residuals	REPORT	GAL/YEAR	Calculated	January thru December
Total Amount of Sludge Removed	Industrial Residuals	REPORT	DMT/YR	Calculated	January thru December
Solids, Total	Industrial Residuals	REPORT	%TS	Composite	January thru December

**Residuals Transfer Reporting Requirements:**

Submit an Annual RTR: due 60 calendar days after the end of each calendar year.

MONITORED LOCATION:

SIB6 API Separator

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

**Location Description**

Annually, a Residuals Transfer Report shall be completed for residuals removed from the API Separator in accordance with the Sludge Quality Assurance Regulations (SQAR, N.J.A.C. 7:14C).

**Contributing Waste Types**

Ind Residual-Other

**Residuals Transfer Reporting Requirements:**

Submit an Annual RTR: due 60 calendar days after the end of each calendar year.

## PART IV

### SPECIFIC REQUIREMENTS: NARRATIVE

#### Industrial Wastewater

##### A. MONITORING REQUIREMENTS

###### 1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136 unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- c. The permittee shall utilize analytical methods that will ensure compliance with the Quantification Levels (QLs) listed in PART III. QLs include, but are not limited to, Recommended Quantification Levels (RQLs) and Method Detection Levels (MDLs). If the permittee and/or contract laboratory determines that the QLs achieved for any pollutant(s) generally will not be as sensitive as the QLs specified in PART III, the permittee must submit a justification of such to the Bureau of Surface Water Permitting. For limited parameters with no QL specified, the sample analysis shall use a detection level at least as sensitive as the effluent limit.
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- g. Annual and semi-annual wastewater testing shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.
- h. Monitoring for Wastewater Characterization Report parameters shall be conducted concurrently with the Whole Effluent Toxicity (WET) monitoring, when feasible.
- i. The permittee shall perform all residual analyses in accordance with the analytical test procedures specified in 40 CFR 503.8 and the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C) unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- j. Effluent flow shall be measured using a flow meter.

##### B. RECORDKEEPING

###### 1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

## C. REPORTING

### 1. Standard Reporting Requirements

- a. The permittee shall submit all required monitoring results to the Department on the forms provided to them. The Monitoring Report Forms (MRFs) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.
- b. Any MRFs in paper format shall be submitted to the following addresses:
  - i. New Jersey Department of Environment Protection  
Mail Code 401-02B  
Division of Water Quality  
Office of Permit Management  
P.O. Box 420  
Trenton, New Jersey 08625-0420.
  - ii. (if requested by the Water Compliance and Enforcement Bureau)  
NJDEP: Central Bureau of Water Compliance and Enforcement  
Mail Code 44-03  
P.O. Box 420  
Trenton, New Jersey 08625-0420.
- c. Any electronic data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.
- d. All monitoring report forms shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current Discharge Monitoring Report Manual and any updates thereof.
- g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.



**D. SUBMITTALS****1. Standard Submittal Requirements**

- a. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

**2. Polychlorinated Biphenyls (PCB) Monitoring**

- a. The permittee has completed sampling for PCBs as required in a previous permit action. The Department is currently reviewing the sampling data for this and other facilities to determine which facilities are discharging at more elevated levels. Once the Department completes this review and if the permittee's effluent is discharging PCBs at more elevated levels, the Department will require the permittee to develop and submit a PMP for approval within 12 months from the effective date of the permit action the requirement is incorporated in.

**3. PCB Pollutant Minimization Plan (PMP) Requirements**

- a. If, based on the review of the Final Report, the Department determines that a PMP is required, the permittee shall prepare and submit a PMP to the Department by the date specified in the Department's determination letter.
- b. The permittee shall implement the PMP within 30 days after written notification by the Department that the PMP is complete.
- c. The PMP shall be developed to achieve maximum practical reduction in accordance with the PMP Technical Manual.

**4. PCB PMP Annual Report Requirement**

- a. The permittee shall submit an annual report in accordance with the Annual Report Guidance Document every 12 months from the implementation of the PMP.
- b. Any revisions to the PMP as a result of the ongoing work shall be reported in the annual report.
- c. The annual report shall contain, at a minimum, a detailed discussion of the specific progress and actions taken by the permittee during the previous twelve month period that addresses PCB loadings and implementation of the PMP.

**E. FACILITY MANAGEMENT****1. Discharge Requirements**

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.

- e. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.
- f. The Permittee is not authorized to use any corrosion inhibitors, biocides or other cooling water additives at the facility.

## **2. Interstate Environmental Commission**

- a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations." Although no monitoring requirements specific to the IEC are included in this permit, compliance may be determined by the IEC based on its own sampling events. IEC effluent requirements shall not be considered effluent limitations for the purpose of mandatory penalties under N.J.S.A. 58:10A-10.1.

## **3. Applicability of Discharge Limitations and Effective Dates**

- a. Surface Water Discharge Monitoring Report (DMR) Form Requirements
  - i. The final effluent limitations and monitoring conditions contained in PART III for DSN 001C apply for the full term of this permit action.
- b. Wastewater Characterization Report (WCR) Form Requirements
  - i. The final effluent monitoring conditions contained in PART III for DSN 001C apply for the full term of this permit action.

## **4. Operation, Maintenance and Emergency conditions**

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.
- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with NJAC 7:14A-6.12(d).

## **5. Toxicity Testing Requirements - Acute Whole Effluent Toxicity**

- a. Part III of this permit contains an Action Level (AL) for Acute Whole Effluent Toxicity. Toxicity Reduction and Implementation Requirements (TRIR) may be triggered based on exceedences of this AL. See TRIR section below for more details.
- b. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- c. Acute toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- d. Any test that does not meet the specifications of N.J.A.C. 7:18, laboratory certification regulations, must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- e. The permittee shall collect and analyze the concentration of ammonia-N in the effluent on the day a sample is collected for WET testing. This result is to be reported on the Biomonitoring Report Form.

- f. The permittee shall resubmit an Acute Methodology Questionnaire within 60 days of any change in laboratory.
- g. Submit an acute whole effluent toxicity test report: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms.
- h. Test reports shall be submitted to:
  - i. New Jersey Department of Environmental Protection  
Mail Code 401-02B  
Division of Water Quality  
Bureau of Surface Water Permitting  
P.O. Box 420  
Trenton, New Jersey 08625-0420.

#### **6. Toxicity Reduction Implementation Requirements (TRIR)**

- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the action level specified in Part III of this permit.
  - i. If the exceedence of the action level is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the action level in Part III. The monitoring frequency for toxicity testing shall be increased to monthly. Up to 12 additional tests may be required.
  - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the action level.
  - ii. If two out of any six consecutive, acceptable tests again exceed the action level in Part III, the permittee shall repeat the TRIR.
- c. The permittee shall initiate a Preliminary Toxicity Identification (PTI) upon the third exceedence of the action level specified in Part III during toxicity characterization.
  - i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.
  - ii. As appropriate, the PTI shall include:
    - (1) treatment plant performance evaluation,
    - (2) pretreatment program information,
    - (3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
    - (4) evaluation of chemical use and processes at the facility, and
    - (5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.

- iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.
- iv. The permittee shall submit a PTI Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a Comprehensive Toxicity Investigation (CTI).
- d. The permittee must demonstrate compliance with the action level in four consecutive WET tests to satisfy the TRIR. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a CTI if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the action level in Part III can not be made.
  - i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
  - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the action level in Part III, a CTI Workplan must be prepared and submitted within 90 days.
  - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
  - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
  - i. The permittee shall satisfy the requirements of the TRIR and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the action level in Part III in four consecutive toxicity tests.
  - ii. If the implemented corrective measures do not result in consistent compliance with the action level in Part III, the permittee shall submit a plan for resuming the CTI.

## **F. CONDITIONS FOR MODIFICATION**

### **1. Notification requirements**

- a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using the specified QL.

### **2. Causes for modification**

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

HESS CORPORATION - PORT READING REFINERY, Woodbridge

Permit No.NJ0028878  
DSW140001 Surface Water Revoke & Reissue Permit Action